29 October 2013

Weekly Commentary

Emerald Lakes, Tongariro National Park

In this issue

Living in New Zealand comes back into fashion

The New Zealand economy is quite volatile compared to others in the OECD. This is partly because New Zealand is small and has a fairly narrow basket of exports. But another contributor is New Zealand's wildly varying net immigration rate, which has caused population growth to range from 0.5% to 2.0% over the past twenty years. What's more, net immigration tends to move in the same direction as other drivers of the economy, thus rendering economic cycles larger than they would otherwise be.

Because of the importance of net immigration, we tend to watch it closely. So does the Reserve Bank. Monthly net immigration has sat above 2,000 for three of the past four months, and above 1,000 since March. The last time we had a similarly strong run was back in 2009. The reasons were similar: back then, Kiwis stayed home as overseas work opportunities dried up following the Global Financial Crisis. This time, it's the winding down of the Australian mining boom and the resulting drop in Australian business confidence that's caused offshore job prospects to wane, and departures of New Zealanders to Australia to decline.

This migration upswing is likely to be bigger and last longer than the 2009 boomlet: we now expect it to peak at an annual rate of 33,000 by the second half of next year, as Australian unemployment continues to rise and the Canterbury rebuild continues to attract overseas-based workers into New Zealand.

Historically, an extra 10,000 migrants has meant around 3% extra house price inflation. In other words, migration is turning from a drag on the housing market to a significant supportive factor. This is one reason why we expect house prices to keep rising next

Living in New Zealand comes back into fashion continued

year (albeit at a slower pace), despite the headwinds of lending restrictions and recent rises in fixed-term mortgage rates.

Still on the topic of population, Statistics NZ's latest annual figures of regional population growth once again put paid to an idea that has been persistently popular, but which we have never considered credible – the notion that Auckland's house price inflation is a function of people moving away from quake-affected Canterbury. Auckland's population growth rate in the year to June 2013 was 1.4%. One percentage point of that was due to births and deaths. The remainder came from international migration. People moving from other regions of New Zealand were scarcely a factor in Auckland's population growth at all. Meanwhile, Canterbury's population growth rate was actually the second highest in the country, at 1.3%.

The OCR hiking cycle may be delayed on account of the high exchange rate

As population growth and other factors have clearly produced an improvement in the New Zealand's cyclical position this year, the Reserve Bank has steadily built the case for hiking the OCR. However, we suspect that Thursday's OCR review will be a step against that trend. The RBNZ is likely to sound more cautious about OCR hikes, on account of the higher exchange rate. One way of doing this might be to introduce the exchange rate into the RBNZ's statement of conditionality. The penultimate sentence of the September *MPS* was:

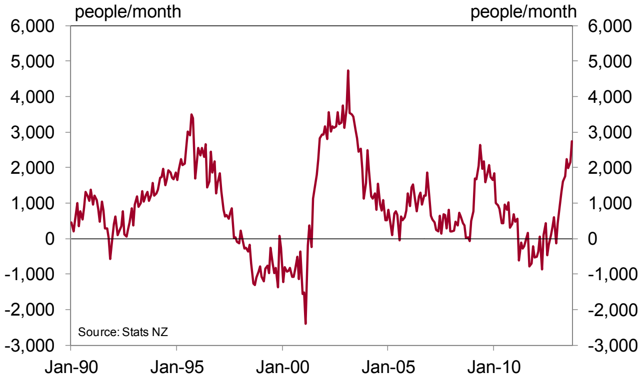
"The extent and timing of the rise in policy rates will depend largely on the degree to which momentum in the housing market and construction sector spills over into broader demand and inflation pressures."

At Thursday's review, the RBNZ may tack onto the end of the sentence the words *"and on the trajectory of the exchange rate"*.

Pending change to Westpac's OCR call

For our own part, we are starting to doubt the idea of a March OCR hike, which has been our forecast since April this year and is now priced in by markets. The recent appreciation of the exchange rate looks as though it will be maintained, and our long-held view is that the housing market will slow in the final months of this year. Under those conditions, the RBNZ would choose not to hike in March, despite the strength of the domestic economy.

Net immigration, seasonally adjusted



Subject to confirmation that Thursday's OCR review is along the lines we expect, we are therefore likely to shift our call to forecasting an April 2014 start date to the OCR hiking cycle.

But we think the OCR will eventually need to rise to 5.5%

For markets, almost as important as the start date of the OCR hiking cycle is its extent. Everybody agrees that the OCR will have to rise to its neutral level or beyond. But that begs the question: what is the neutral OCR?

The RBNZ gave a speech a couple of weeks back contending that the neutral OCR had fallen from 5.8% in the mid-2000s to around 4.3% today.

We issued our own take on the neutral OCR in a bulletin last week. We agree with the idea that the neutral OCR has fallen to around 4.3% today. However, we make the additional point that neutral is not a static concept. There are very good reasons to expect the neutral OCR will rise over the next five years, including higher inflation expectations, falling bank funding premia, lower global population growth, and possibly even a reduction in the intensity of global preferences to save.

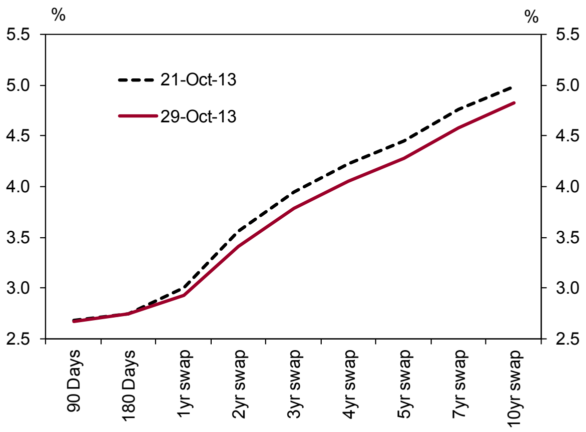
We are working off the assumption that the neutral OCR will rise to 5% by 2018. If the OCR has to rise a little above neutral to control the inflation consequences of the huge Canterbury rebuild, that implies a peak OCR of 5.5% – on our current forecast, we'll reach that level at the end of 2016.

Fixed vs Floating for mortgages

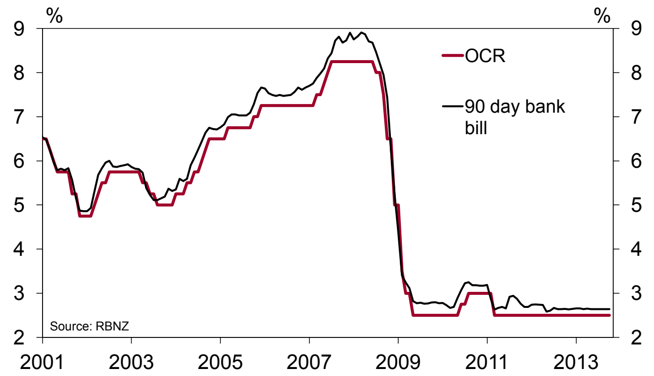
We are now indifferent between fixing and floating.

In our view, interest rate markets are now "fairly priced". We expect short-term rates to rise substantially over the next three years. The level of long-term fixed rates, which are higher than short-term rates, is in tune with that expectation. This means we can discern no obvious interest rate advantage in any particular term. The decision can be treated as a risk management choice according to individual circumstances.

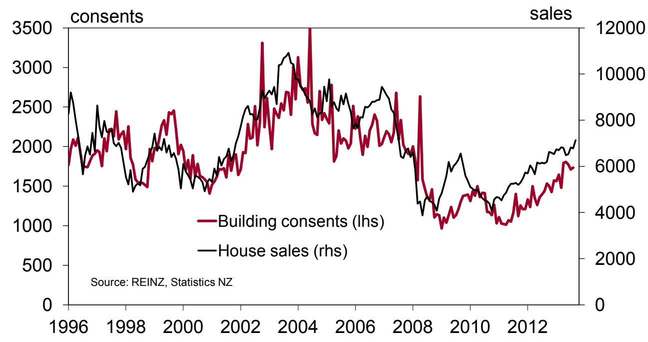
NZ interest rates



NZ OCR and 90 day rate



NZ housing activity



NZ RBNZ OCR review

Oct 31, Last: 2.5%, Westpac f/c: 2.5%, Market: 2.5%

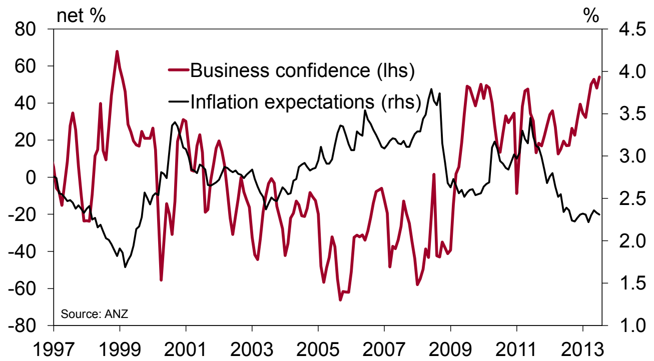
- Over the course of this year, the RBNZ has been steadily building the case for OCR hikes next year. We have been forecasting a March 2014 hike, and markets are pricing the same.
- However, the high exchange rate may cause the RBNZ to strike a slightly more dovish tone on Thursday. The RBNZ may say that the extent and timing of hikes depends on the exchange rate as well as house prices and construction activity.
- If the Review is along the lines we expect, we will shift our OCR forecast to an April 2014 hike.

NZ Sep building consents

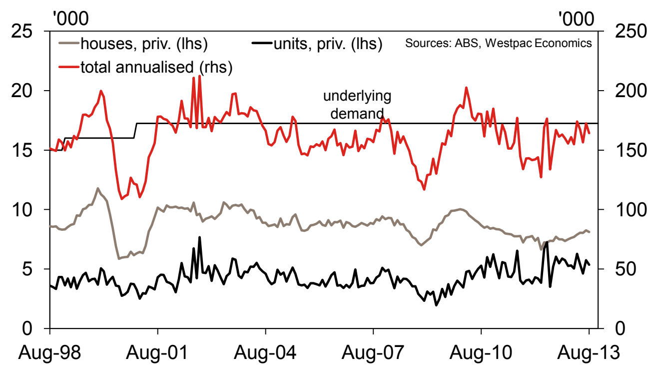
Oct 31, Last: +0.8%, Westpac f/c: +2.0%

- Residential building consents have remained on an upward trend this year, although they have struggled to make further gains after a whopping 21% rise in April. We have assumed a modest increase for September, with a risk that the volatile apartments component could swing either way.
- The uptrend will continue to be led by the under-supplied Auckland and Canterbury regions. Consents in Christchurch have taken another step up in the last few months, partly reflecting government pressure to speed up the consenting process. However, the monthly figures for Auckland have been erratic, and fell sharply in August.
- There are some concerns that the recently introduced limits on low-equity home loans will slow housing construction. However, it will probably be several months before this shows up at the consent stage.

NZ business confidence and inflation expectations



Dwelling approvals



NZ Oct ANZ business confidence

Oct 31, Last: 54.1

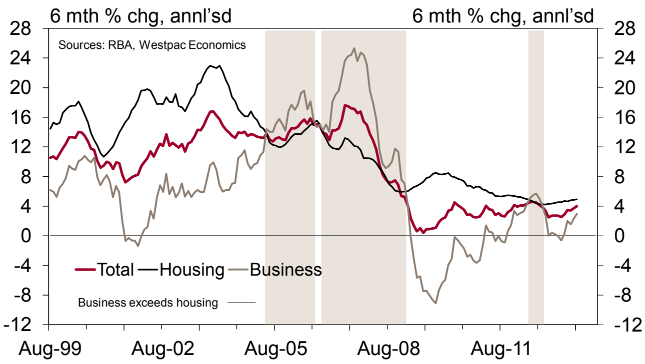
- Business confidence rose to a 14-year high in September, with expected profits, employment and investment intentions and capacity utilisation all at or very close to post-recession highs. This survey alone suggests GDP growth of around 1% for the September quarter; with dairy production rebounding sharply from drought, we expect the actual outturn to be even stronger than that.
- Business confidence has been running at high levels for some time; we're now turning our attention to the indicators of inflation pressures. Capacity utilisation and pricing intentions have risen sharply in recent months, but general expectations of inflation remained near their cycle lows in September. Note that the stronger than expected CPI figures published on October 16 won't be reflected in this survey until November.

Aus Aug dwelling approvals

Oct 31, Last: –4.7%, WBC f/c: 2.0%
Mkt f/c: 2.8%, Range: 1.5% to 6.0%

- Dwelling approvals fell 4.7% in Aug. Some of the decline seems to be due to changes in state government policy assistance for first home buyers in Vic, with approvals in the state spiking in Jul and dropping back sharply in Aug (though only reversing part of the run-up). The fall was also concentrated in high rise. However, approvals were also softer elsewhere.
- Although monthly volatility makes pinpointing the underlying trend difficult at the moment, construction-related finance approvals suggest the upturn is starting to flatten out. With a further unwind likely in Vic that suggests a modest rebound in total approvals in Aug – we expect a 2% gain, keeping a slight uptrend intact.

Credit momentum

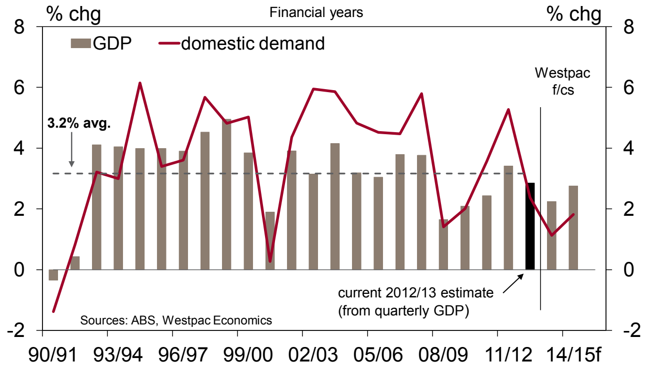


Aus Sep private credit

Oct 31, Last: 0.3%, WBC f/c: 0.4%
Mkt f/c: 0.4%, Range: 0.3% to 0.5%

- Credit growth to the private sector while still relatively sluggish has ticked higher in 2013 as business credit advances after consolidating during the second half of last year.
- We expect credit to rise by 0.4% in September, matching the average of the past three months and up from an average monthly gain of 0.2% during the opening quarter of 2013.
- Housing credit growth, which was 0.4%, 4.7%yr in August is set to strengthen gradually as the sector responds to lower rates.
- Business credit rose 0.2% in August and we expect a similar result in September. While investment remains soft in response to subdued household demand in recent quarters, some are looking to lock-in current low borrowing costs.

Australia: annual economic performance

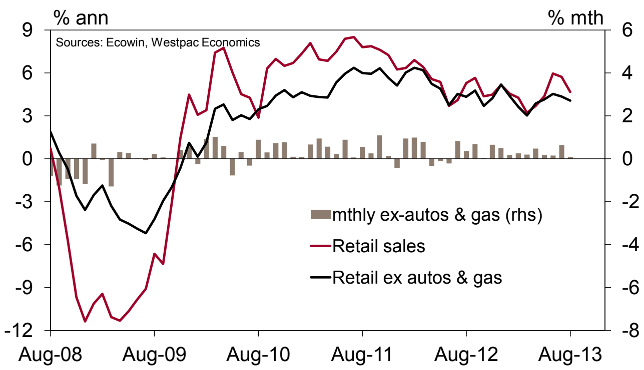


Aus 2012/13 annual national accounts

Nov 1, Current estimate: 2.9%

- Australia's economy expanded by 2.9% in 2012/13, as reported in the June quarter national accounts.
- The annual accounts usually includes revisions. Some of these have already been flagged. Dwelling investment following the 'audit' that found significant errors in previous estimates of dwelling approvals, commencements and work done. Better estimates of 'low value' consumer goods imports (i.e. consumers importing items directly including those purchased from offshore-based online retailers) will likely see upward revisions to imports and consumption estimates with related downward revisions to net exports and the household savings rate. While individually these changes are unlikely to significantly alter key aggregate measures, they may shift the growth profile once they are incorporated into quarterly estimates with the Q3 GDP accounts published on Dec 4.

US retail sales

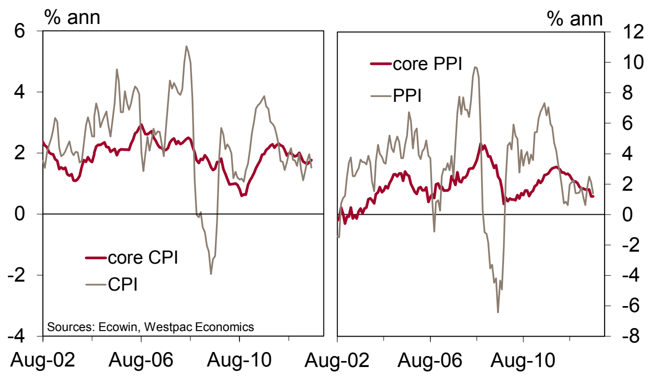


US Sep retail sales to remain sluggish

Oct 29, Last: 0.2%, WBC 0.0%

- Retail sales rose 0.2% in August. With autos up 0.9%, gasoline flat, and clothing, DIY, sporting goods and general merchandise all posting falls, and no standout strong storetypes in Aug, this was a weak report, but for an upward revision to July. Ex autos/gas, core retailing rose 0.1%, continuing the recent pattern whereby the first month of the quarter has tended to see solid core sales growth, before nearly stalling later in the quarter.
- Auto sales fell 2.6% in Sep and gasoline prices have been drifting lower. August income and spending data showed evidence of renewed consumer saving and although Sep payrolls, hours worked and earnings data are not yet available, the slower jobs growth revealed by the ADP survey, and falling consumer confidence, provide reason to expect another sluggish core retail outcome. On our forecasts a 0.2% core rise will just offset lower auto and gasoline sales.

US price inflation

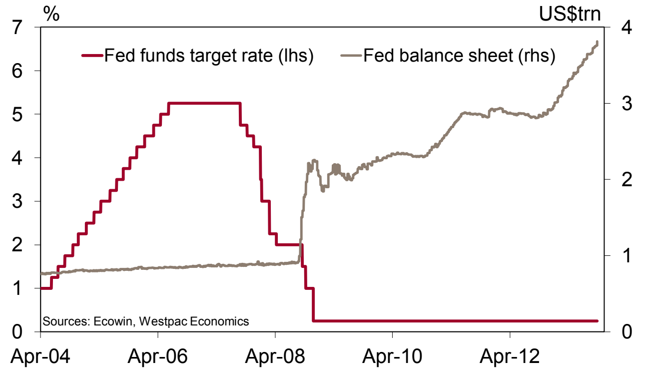


US Sep CPI

Oct 30, CPI: Last: 0.1%, WBC f/c: 0.1%

- The CPI rose 0.1% in Aug, both headline and core. Energy prices fell 0.3%, food rose 0.1%, and above-trend gains in rent (0.3%) and medical care (0.6%) were offset by flat auto prices and ongoing falls in airfares (–3.1%).
- Gasoline prices drifted lower in Sep, some of which is seasonal so not captured in the headline index. The August PPI revealed rising wholesale food prices which were not passed on to consumers that month, but could hit the Sep CPI.
- If, as we expect, medical care and owner rent revert to their recent trend pace of gain, the core CPI will print 0.1% again in Sep. Apparel and auto prices have not fallen since April/Feb respectively and pose further downside risk. The headline CPI should also print 0.1% if gasoline/food price shifts are offsetting. That would pull the annual rate down to 1.1%yr, its equal lowest since the 2009 recession.

Fed funds target rate and balance sheet

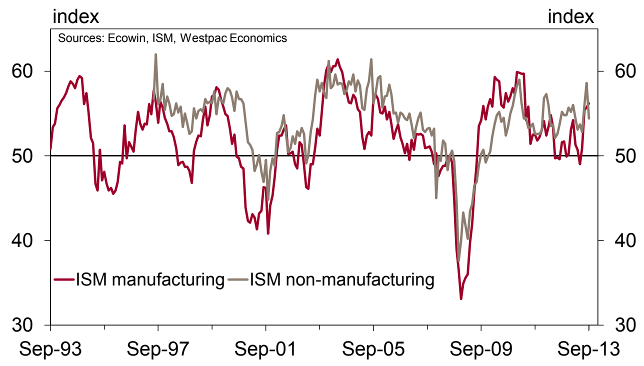


US FOMC meeting

Oct 30, Last: $85bn, WBC f/c: $85bn

- As we argued consistently since May, the case for winding back the Fed's asset purchases would not be made as early as September. A 9:1 majority agreed, and for those meeting participants who thought it a close call (the minutes don't reveal if they were voting this year or not), the uncertainty and economic impact surrounding the fiscal impasse must weigh against starting to taper this month.

US ISMs



US Oct ISM manufacturing survey

Nov 1, Factory: Last: 56.2, WBC f/c: 52.5

- The ISM factory index rose from 55.7 to 56.2 in Sep, its fourth straight rise from a contractionary 49.0 in May. That is the strongest reading for this respected indicator since April 2011. The detail showed production and orders holding above 60, and employment rising to a 15 month high at 55.4.
- This survey has been outperforming relative to regional Fed survey detail and the Fed's lacklustre industrial production figures, barely flat in trend terms outside of seasonal swings in auto output. We expect GDP growth to slow to back below 2% annualised in Q3; at some point the ISM factory survey should fall back towards the low 50s (it averaged 51.5 in H1 2013 when GDP was 1.8% annualised)
- Recall the similarly out-performing ISM non-manufacturing, corrected sharply lower from 58.6 to 54.4 in Sep.

Data calendar

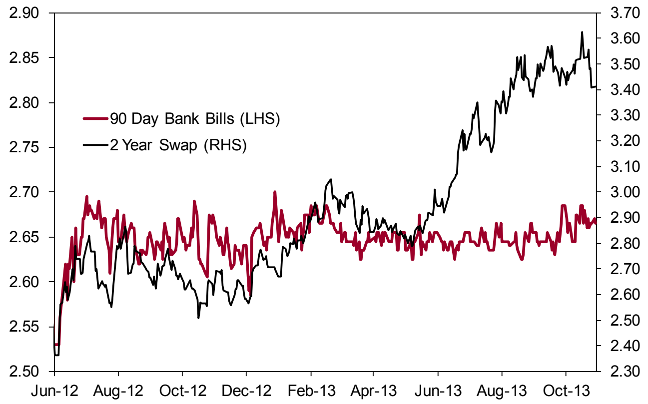
		Last	Market median	Westpac forecast	Risk/Comment
Tue 29					
Aus	RBA Governor Stevens	–	–	–	Remarks to Citi's Australia & NZ investment conference, Sydney, 9:30am
Ger	Nov GfK consumer confidence	7.1	7.2	–	Surveyed early Oct but labelled Nov. At highest since 2007.
UK	Sep net mortgage lending £bn	1	1.4	–	BoE/Treasury FLS credited with modest rise in household loan out-
	Sep net consumer credit £bn	0.6	0.8	–	standings, though demand for credit outside mortgages still weak.
	Sep M4 money supply ex IOFCs %yr	4.30%	–	–	Down from 7.9% yr in Aug 12, a function of BoE APP suspension.
US	Sep PPI	0.30%	0.20%	0.20%	Energy prices turning lower, food prices normalising.
	Sep PPI core	0.00%	0.10%	0.10%	Core trend now barely 0.1%, some upside risk from vehicle prices.
	Sep retail sales	0.20%	0.20%	0.00%	Auto and gasoline sales probably declined, offsetting cautious core
	Sep retail sales ex autos & gas	0.10%	–	0.20%	retail sales growth for a flat overall outcome.
	Aug business inventories	0.40%	0.30%	0.20%	Inventories expanded 1.0% in Jan but kept tight since then.
	Aug S&P/CS 20-city house prices %yr	12.40%	12.40%	–	Effect of higher rates to begin?
	Oct Conf Board consumer confidence	79.7	75.9	74.5	Fell 13 pts in Dec-Jan during 95-96 gov't shutdown and blizzard.
Can	Aug industrial product prices	0.20%	0.10%	–	Recent back to back gains yet to offset April decline.
Wed 30					
Eur	Oct business climate indicator	–0.20	–0.2	–0.25	Business surveys showing some signs of stalling at improved levels;
	Oct economic confidence	96.9	97.5	–	we question sustainability of upswing.
Ger	Oct unemployment ch'	25k	0k	–	Q3 jobless rise matched Q4 12's 30k, steepest since 2009 recession.
	Oct CPI prelim %yr	1.40%	1.40%	–	1.4% is below midpoint of April-July spike from 1.2% yr to 1.9% yr.
US	FOMC decision $bn per mth	85	85	85	Govt shutdown strengthens case against tapering. See text box.
	Sep CPI	0.10%	0.20%	0.10%	Gasoline prices fell in Sep, but PPI food price pressures a risk.
	Sep CPI core	0.10%	0.20%	0.10%	Downside risk from apparel, OER (rent), medical care.
	Oct ADP private payrolls	166k	166k	120k	Should capture non-federal workers impacted by gov't shutdown.
Thu 31					
NZ	RBNZ OCR Review	2.50%	2.50%	2.50%	Slight dovish tilt on account of high exchange rate.
	Sep building consents	0.80%	–	2.00%	Trending up, led by Auckland and Christchurch.
	Oct ANZ business confidence	54.1	–	–	Confidence strong; capacity/inflation pressures the next to watch.
	September private sector credit %yr	4.40%	–	–	LVR restrictions likely to hit mortgage loan growth from Nov onwards.
Aus	Sep dwelling approvals	–4.7%	2.80%	2.00%	Partial recovery from Aug fall but uptrend looks to be flattening out.
	Sep private credit	0.30%	0.40%	0.40%	Monthly growth to match avg of past 3 months, see text box.
	Q3 import price index	–0.3%	4.30%	6.50%	Import costs up as AUD down 6.6% against TWI & oil costs up 14%.
	Q3 export price index	–0.3%	3.30%	4.50%	Up, AUD –7.5% against USD, while commodity prices –4% in USD terms.
Eur	Oct CPI flash %yr	1.10%	1.10%	–	Ger CPI due 30/10 helpful clue. Eurozone core was 1.0 yr% in Sep.
	Sep unemployment rate %	12.00%	12.00%	12.10%	Higher German jobless rate but slower rises elsewhere.
US	Sep corporate layoffs %yr	19.10%	–	–	Challenger series.
	Initial jobless claims w/e Oct 25	350k	–	–	Claims moderated last week from 362k to 350k.
	Oct Chicago PMI	55	–	51	Fell 10 pts during blizzard/shutdown of 1995-96.
	Oct Milwaukee NAPM	55	–	50	Milwaukee lesser watched.
Can	Aug average weekly earnings	1.30%	–	–	Uptrend from late 2011 turned into downtrend since late 2012.
	Aug GDP	0.60%	0.10%	–	July bounce from June industrial disruption, flooding.
Fri 1					
Aus	Q3 PPI	0.10%	–	0.40%	Rising petroleum and depreciation of AUD to help lift wholesale prices.
	2012/13 annual national accounts	2.90%	–	–	2012/13 GDP growth of 2.9% subject to revision, see textbox.
	Oct RP Data-Rismark home price index	1.60%	–	1.20%	Oct gain led by another 2%+ gain in Sydney, patchier gains elsewhere.
	Oct AiG PMI	51.7	–	–	Manufacturing index +5.3pts to above 50 in Sep, first time since Feb '12.
Chn	Oct NBS manufacturing PMI	51.1	–	–	Lean inventories, rising orders in Sep, bodes well for Oct gains.
	Oct HSBC manufacturing PMI	50.9	–	–	Flash estimate surprisingly strong, small downward revision possible.
UK	Oct factory PMI	56.7	56.5	–	Recent survey strength has not been reflected in official IP data.
	Oct GfK consumer confidence	–10	–	–	Highest since 2007.
US	Oct ISM factory index	56.2	55	52.5	Can ISM outperformance vs economy survive shutdown? Surely not!
	Oct auto sales mn annualised	15.2	15.4	–	Sales off recent peak just above 16 mn annualised in Aug.

New Zealand forecasts

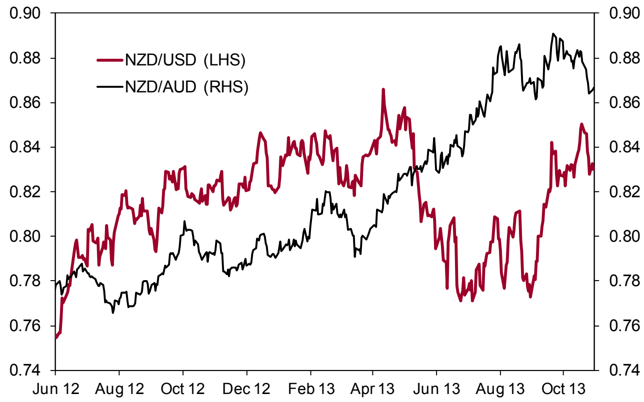
Economic Growth Forecasts	March years				Calendar years			
% change	2012	2013f	2014f	2015f	2011	2012	2013f	2014f
GDP (Production) ann avg	1.9	2.7	3.0	3.8	1.4	2.7	2.8	3.8
Employment	1.0	0.4	2.5	2.8	1.5	-1.4	3.7	2.8
Unemployment Rate % s.a.	6.8	6.2	5.6	4.8	6.3	6.8	5.8	4.8
CPI	1.6	0.9	1.5	2.3	1.8	0.9	1.5	2.1
Current Account Balance % of GDP	-3.8	-4.5	-4.4	-5.4	-3.6	-4.7	-4.2	-5.4

Financial Forecasts	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15
Cash	2.50	2.75	3.00	3.25	3.50	3.75
90 Day bill	2.75	3.00	3.25	3.50	3.75	4.00
2 Year Swap	3.50	3.70	3.80	3.90	4.10	4.20
5 Year Swap	4.40	4.45	4.50	4.60	4.70	4.80
10 Year Bond	4.40	4.50	4.60	4.70	4.75	4.80
NZD/USD	0.83	0.84	0.82	0.79	0.77	0.76
NZD/AUD	0.87	0.90	0.91	0.91	0.90	0.90
NZD/JPY	81.3	81.5	78.7	75.1	71.9	71.1
NZD/EUR	0.63	0.64	0.64	0.64	0.64	0.63
NZD/GBP	0.53	0.53	0.51	0.51	0.50	0.48
TWI	77.7	78.8	77.9	76.5	74.8	74.2

2 Year Swap and 90 Day Bank Bills



NZD/USD and NZD/AUD



NZ interest rates as at market open on Tuesday 29 Oct 2013

Interest Rates	Current	Two weeks ago	One month ago
Cash	2.50%	2.50%	2.50%
30 Days	2.65%	2.65%	2.64%
60 Days	2.66%	2.67%	2.66%
90 Days	2.67%	2.68%	2.69%
2 Year Swap	3.41%	3.52%	3.44%
5 Year Swap	4.28%	4.49%	4.36%

NZ foreign currency mid-rates as at Tuesday 29 Oct 2013

Exchange Rates	Current	Two weeks ago	One month ago
NZD/USD	0.8299	0.8291	0.8270
NZD/EUR	0.6016	0.6114	0.6136
NZD/GBP	0.5138	0.5189	0.5132
NZD/JPY	81.06	81.44	80.69
NZD/AUD	0.8667	0.8802	0.8889
TWI	76.36	77.02	77.03

International forecasts

Economic and Financial Forecasts

Economic Forecasts (Calendar Years)	2009	2010	2011	2012	2013f	2014f
Australia						
Real GDP % yr	1.4	2.5	2.4	3.7	2.5	2.3
CPI inflation % annual	2.1	2.8	3.0	2.2	2.1	2.7
Unemployment %	5.6	5.2	5.2	5.4	6.1	6.7
Current Account % GDP	-4.2	-2.9	-2.3	-3.7	-2.6	-3.0
United States						
Real GDP %yr	-3.1	2.4	1.8	2.8	1.5	1.7
Consumer Prices %yr	-0.3	1.6	3.1	2.1	1.4	1.6
Unemployment Rate %	9.3	9.6	8.9	8.1	7.6	7.5
Current Account %GDP	-2.7	-3.0	-2.9	-2.7	-2.5	-2.7
Japan						
Real GDP %yr	-5.7	4.9	-0.5	1.9	1.9	2.4
Consumer Prices %yr	-1.3	-0.7	-0.3	0.0	-0.2	0.1
Unemployment Rate %	5.2	5.1	4.5	4.3	4.3	4.3
Current Account %GDP	2.8	3.6	2.0	2.1	2.0	2.0
Euroland						
Real GDP %yr	-4.4	1.9	1.6	-0.6	-0.5	-0.1
Consumer Prices %yr	0.3	1.7	2.7	2.2	1.4	1.2
Unemployment Rate %	9.5	10.0	10.1	11.7	12.4	13.0
Current Account %GDP	-0.2	-0.1	0.0	0.9	1.0	1.0
United Kingdom						
Real GDP %yr	-4.0	1.8	0.9	0.2	1.1	0.9
Consumer Prices %yr	2.2	3.2	4.0	2.8	2.3	1.8
Unemployment Rate %	7.6	7.8	8.4	8.0	8.5	8.5
Current Account %GDP	-1.3	-2.5	-1.9	-3.8	-2.5	-1.5
Forecasts finalised 7 October 2013						

Interest Rate Forecasts	Latest	Dec 13	Mar 14	Jun 14	Sep 14	Dec 14
Australia						
Cash	2.50	2.50	2.25	2.00	2.00	2.00
90 Day Bill	2.60	2.60	2.35	2.10	2.10	2.10
10 Year Bond	3.97	3.75	3.60	3.40	3.80	4.00
International						
Fed Funds	0.125	0.125	0.125	0.125	0.125	0.125
US 10 Year Bond	2.50	2.35	2.40	2.40	2.80	3.00
ECB Repo Rate	0.50	0.50	0.50	0.50	0.50	0.50

Exchange Rate Forecasts	Latest	Dec 13	Mar 14	Jun 14	Sep 14	Dec 14
AUD/USD	0.9610	0.95	0.93	0.90	0.87	0.85
USD/JPY	97.00	97	96	95	94	93
EUR/USD	1.3820	1.36	1.33	1.28	1.23	1.20
AUD/NZD	1.1550	1.14	1.11	1.10	1.10	1.10

Westpac economics team contact details

Dominick Stephens, Chief Economist
+64 9 336 5671

Michael Gordon, Senior Economist
+64 9 336 5670

Felix Delbrück, Senior Economist
+64 9 336 5668

Anne Boniface, Senior Economist
+64 9 336 5669

Any questions email:
economics@westpac.co.nz

For email address changes contact:
WNZResearch@westpac.co.nz

Past performance is not a reliable indicator of future performance. The forecasts given in this document are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from these forecasts.

Disclaimer

Things you should know: Each time someone visits our site, data is captured so that we can accurately evaluate the quality of our content and make improvements for you. We may at times use technology to capture data about you to help us to better understand you and your needs, including potentially for the purposes of assessing your individual reading habits and interests to allow us to provide suggestions regarding other reading material which may be suitable for you.

If you are located in Australia, this material and access to this website is provided to you solely for your own use and in your own capacity as a wholesale client of Westpac Institutional Bank being a division of Westpac Banking Corporation ABN 33 007 457 141 AFSL 233714 ('Westpac'). If you are located outside of Australia, this material and access to this website is provided to you as outlined below.

This material and this website contain general commentary only and does not constitute investment advice. Certain types of transactions, including those involving futures, options and high yield securities give rise to substantial risk and are not suitable for all investors. We recommend that you seek your own independent legal or financial advice before proceeding with any investment decision. This information has been prepared without taking account of your objectives, financial situation or needs. This material and this website may contain material provided by third parties. While such material is published with the necessary permission none of Westpac or its related entities accepts any responsibility for the accuracy or completeness of any such material. Although we have made every effort to ensure the information is free from error, none of Westpac or its related entities warrants the accuracy, adequacy or completeness of the information, or otherwise endorses it in any way. Except where contrary to law, Westpac and its related entities intend by this notice to exclude liability for the information. The information is subject to change without notice and none of Westpac or its related entities is under any obligation to update the information or correct any inaccuracy which may become apparent at a later date. The information contained in this material and this website does not constitute an offer, a solicitation of an offer, or an inducement to subscribe for, purchase or sell any financial instrument or to enter a legally binding contract. Past performance is not a reliable indicator of future performance. The forecasts given in this material and this website are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from these forecasts.

Transactions involving carbon give rise to substantial risk (including regulatory risk) and are not suitable for all investors. We recommend that you seek your own independent legal or financial advice before proceeding with any investment decision. This information has been prepared without taking account of your objectives, financial situation or needs. Statements setting out a concise description of the characteristics of carbon units, Australian carbon credit units and eligible international emissions units (respectively) are available at www.cleanenergyregulator.gov.au as mentioned in section 202 of the Clean Energy Act 2011, section 162 of the Carbon Credits (Carbon Farming Initiative) Act 2011 and section 61 of the Australian National Registry of Emissions Units Act 2011. You should consider each such statement in deciding whether to acquire, or to continue to hold, any carbon unit, Australian carbon credit unit or eligible international emissions unit.

Additional information if you are located outside of Australia

New Zealand: The current disclosure statement for the New Zealand division of Westpac Banking Corporation ABN 33 007 457 141 or Westpac New Zealand Limited can be obtained at the internet address www.westpac.co.nz. Westpac Institutional Bank products and services are provided by either Westpac Banking Corporation ABN 33 007 457 141 incorporated in Australia (New Zealand division) or Westpac New Zealand Limited. For further information please refer to the Product Disclosure Statement (available from your Relationship Manager) for any product for which a Product Disclosure Statement is required, or applicable customer agreement. Download the Westpac NZ QFE Group Financial Advisers Act 2008 Disclosure Statement at www.westpac.co.nz.

China, Hong Kong, Singapore and India: Westpac Singapore Branch holds a wholesale banking licence and is subject to supervision by the Monetary Authority of Singapore. Westpac Hong Kong Branch holds a banking license and is subject to supervision by the Hong Kong Monetary Authority. Westpac Hong Kong branch also holds a license issued by the Hong Kong Securities and Futures Commission (SFC) for Type 1 and Type 4 regulated activity.

Disclaimer continued overleaf.

Disclaimer continued

Westpac Shanghai and Beijing Branches hold banking licenses and are subject to supervision by the China Banking Regulatory Commission (CBRC). Westpac Mumbai Branch holds a banking license from Reserve Bank of India (RBI) and subject to regulation and supervision by the RBI.

U.K.: Westpac Banking Corporation is registered in England as a branch (branch number BR000106), and is authorised and regulated by the Australian Prudential Regulatory Authority in Australia. WBC is authorised in the United Kingdom by the Prudential Regulation Authority. WBC is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority in the United Kingdom. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request. Westpac Europe Limited is a company registered in England (number 05660023) and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. This material and this website and any information contained therein is directed at a) persons who have professional experience in matters relating to investments falling within Article 19(1) of the Financial Services Act 2000 (Financial Promotion) Order 2005 or (b) high net worth entities, and other persons to whom it may otherwise be lawfully communicated, falling within Article 49(1) of the Order (all such persons together being referred to as "relevant persons"). The investments to which this material and this website relates are only available to and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such investments will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely upon this material and this website or any of its contents. In the same way, the information contained in this material and this website is intended for "eligible counterparties" and "professional clients" as defined by the rules of the Financial Services Authority and is not intended for "retail clients". With this in mind, Westpac expressly prohibits you from passing on the information in this material and this website to any third party. In particular this material and this website, website content and, in each case, any copies thereof may not be taken, transmitted or distributed, directly or indirectly into any restricted jurisdiction.

U.S.: Westpac operates in the United States of America as a federally licensed branch, regulated by the Office of the Comptroller of the Currency. Westpac is also registered with the US Commodity Futures Trading Commission ("CFTC") as a Swap Dealer, but is neither registered as, or affiliated with, a Futures Commission Merchant registered with the US CFTC. Westpac Capital Markets, LLC ('WCM'), a wholly-owned subsidiary of Westpac, is a broker-dealer registered under the U.S. Securities Exchange Act of 1934 ('the Exchange Act') and member of the Financial Industry Regulatory Authority ('FINRA'). This communication is provided for distribution to U.S. institutional investors in reliance on the exemption from registration provided by Rule 15a-6 under the Exchange Act and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors in the United States. WCM is the U.S. distributor of this communication and accepts responsibility for the contents of this communication. All disclaimers set out with respect to Westpac apply equally to WCM. If you would like to speak to someone regarding any security mentioned herein, please contact WCM on +1 212 389 1269. All disclaimers set out with respect to Westpac apply equally to WCM.

Investing in any non-U.S. securities or related financial instruments mentioned in this communication may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the SEC in the United States. Information on such non-U.S. securities or related financial instruments may be limited. Non-U.S. companies may not subject to audit and reporting standards and regulatory requirements comparable to those in effect in the United States. The value of any investment or income from any securities or related derivative instruments denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related derivative instruments.

The author of this communication is employed by Westpac and is not registered or qualified as a research analyst, representative, or associated person under the rules of FINRA, any other U.S. self-regulatory organisation, or the laws, rules or regulations of any State. Unless otherwise specifically stated, the views expressed herein are solely those of the author and may differ from the information, views or analysis expressed by Westpac and/or its affiliates.

For the purposes of Regulation AC only: Each analyst whose name appears in this report certifies that (1) the views expressed in this report accurately reflect the personal views of the analyst about any and all of the subject companies and their securities and (2) no part of the compensation of the analyst was, is, or will be, directly or indirectly related to the specific views or recommendations in this report.